



Yale on \$0 a Day

**Top Universities Post Lectures
And Other Course Materials
On Web, Free and Open to All
Literature of Crisis on Your iPod
By ANNE MARIE CHAKER
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Getting into college may be tougher than it used to be. But top schools are offering a growing number of courses free online.

Following the lead of the Massachusetts Institute of Technology and other highly competitive schools, more institutions are posting online everything from lecture notes to sample tests, and even making audio and video files of actual lectures publicly available. The sites attract anywhere from thousands to more than one million unique visitors each month.

The moves -- which differ from the "distance learning" courses that many schools offer for credit and charge for -- come as colleges and universities say they want to democratize education, making the best resources available to more people. But they also hope that it leads to more interest from potential applicants and inspires alumni in far-flung locales to make a donation.

MIT's pioneering "OpenCourseWare" program, which was launched in 2003, posts the syllabus and class notes for more than 1,500 courses online for anyone who wants them. By this November, it aims to publish materials from virtually all 1,800 of its courses across all its schools.

FREE EDUCATION

[See video of a lecture](#) by MIT Professor Walter Lewin from Physics 1: Classical Mechanics. ([RealPlayer required](#))

Starting last fall, the University of Notre Dame in South Bend, Ind., began offering eight courses, from Introduction to Philosophy to African American History, and including everything from class plans, links to required readings, lecture notes and homework assignments. The school aims to increase the number of classes offered online to 30 courses over the next two years.

Yale University, meanwhile, has announced it will produce digital videos of undergraduate lecture classes and make them available free to the public. This academic year, it is taping seven classes -- from Introduction to the Old Testament to Fundamentals of Physics -- to be posted online this fall.

Some smaller liberal-arts schools are following suit. Bryn Mawr College, a women's school in Pennsylvania, is in the process of selecting course materials to post online, free

to the public, beginning this summer. It plans to include classes ranging from psychology and physics to one on the history of Philadelphia.

Some schools that follow the MIT model are focused on making available as many course materials as possible -- including class plans, lecture notes, lists of reading materials and even homework. Other schools, including University of California, Berkeley, are simply making lectures available through audio and video files. In MIT's Introduction to Modeling and Simulation, a science and engineering class, Web surfers can browse through assignments and sample quizzes, as well as suggested project ideas. As with other MIT courses, the syllabus is posted -- so you can see the structure of the course and what text and other reading materials are used -- but only some lecture notes are available.

Some MIT online courses are even more comprehensive. All of the lectures for legendary professor Walter Lewin's Physics I, II and III courses are on video, in addition to detailed lecture notes, assignments and practice exams.

Dr. Lewin says he receives emails every day from the general public and tries to answer all of them. And while a few of them can be "annoying" when they start to dispute his reply, he says the emails of appreciation from the public -- kids and adults who say they grew to love physics through the lectures -- make it all worthwhile. "Some of them make me cry," Dr. Lewin says.

Robert Croghan, a Canadian entrepreneur living on the Caribbean island of St. Lucia, says he has used some of the MIT courses as guidance for an alternative-energy project he is working on. Mr. Croghan says he read the lectures for courses on international development and entrepreneurial finance for extra guidance. "They allowed me to take my street smarts and apply it with the terminology from a formal education," he says.

In White House, Tenn., Army First Lt. Ronnie E. Matthews Jr. took Notre Dame's Foundations of Theology course online. Lt. Matthews has been doing "a lot of soul searching," he says, which is why he was drawn to the course. He says he spends about an hour a day reading the Bible by following the class plans and lecture notes and doing the homework assignments listed by Prof. Gary Anderson. "It's challenging," he says. On most nights, he dives into his studies after he puts his baby to bed.

College Without Fees

A sampling of university courses that you can access online for free.

School/Web site	Sample Course	Description
Massachusetts Institute of Technology ocw.mit.edu	Physics I: Classical Mechanics, Fall 1999	Features a complete set of videotaped lectures by Prof. Walter Lewin.
University of Notre Dame ocw.nd.edu	Islamic Societies of the Middle East and North Africa: Religion, History and Culture, Fall 2005	Course includes detailed lecture notes, a calendar of readings assigned for each class and a description of major assignments.
Tufts University ocw.tufts.edu	Producing Films for Social Change, Fall 2005	Offers student-made documentaries about social issues as well a list of weekly readings.
Stanford University itunes.stanford.edu	The Literature of Crisis	Professors Martin Evans and Marsh McCall lecture on great works by Virgil to Voltaire.
University of California, Berkeley itunes.berkeley.edu or webcast.berkeley.edu	Foundations of American Cyber-culture	Both fall and spring semester lectures are available for this course on new media and Web culture.

Source: WSJ research

Podcasting, or making audio files downloadable to computers and MP3 players such as iPods, is also becoming increasingly popular. To capitalize on the academic interest, [Apple](#) Inc. launched an iTunes U Web hosting service a year ago to encourage universities to make audio and video files of lectures and other course materials downloadable.

Colleges that use the service include Stanford University, which last fall began posting the complete lectures for three courses: the Literature of Crisis, the Historical Jesus, and Modern Theoretical Physics. Stanford plans on making complete lectures for a dozen classes available on the iTunes U site by the end of 2007.

Apple doesn't charge schools to use its platform, saying that it's advantageous for the company to open its technology to young users using it for school. "It allows people to think about an iPod in a different way" other than just listening to music, says Eddy Cue, vice president of iTunes.

Many of the schools that offer free online coursework are supported through grants from the William and Flora Hewlett Foundation, which says it hopes to promote "open educational resources." Hewlett so far has given over \$68 million to universities and nonprofits to post free online materials.

"Knowledge is a public good, and a public good should be freely shared," says Catherine Casserly, program officer for education at the Menlo Park, Calif., foundation. "Through the contributions of many, we can revolutionize teaching and learning."

That mission -- democratizing education -- also appeals to universities. But schools aren't interested only in the public good: Schools say that offering materials online can draw in potential applicants curious about what an actual course looks like.

An MIT survey of users showed that about a third of freshmen who were aware of the site before attending the university said it made a significant impact on their decision to enroll.

Universities say they don't worry about losing applicants by giving away materials online. "From Yale's point of view, there still is nothing more important than direct interaction between students and teachers," says Diana E.E. Kleiner, an art-history professor and director of the Yale project. "Putting a selection of our courses online doesn't change that."

Write to Anne Marie Chaker at anne-marie.chaker@wsj.com